

Memorandum

To : Thomas P. Hallenbeck
Director
District 9

Date : January 13, 2000

From : Brad Mettam
Associate Transportation Planner
Regional Planning
District 9 - Bishop

Subject : Briefing: Low-level Radioactive Waste Transportation through California

Background:

The Nevada Test Site (NTS) in Southern Nevada has been used by the U. S. Department of Energy (DOE) for the disposal of low-level radioactive wastes and mixed wastes generated by the weapons program since the early 1960's. Shipments to the NTS have historically been by truck, with the routing determined by the carrier in conformance with 49 CFR 397.101 (Routing of Class 7 [Radioactive] Materials). The routes used have generally passed through Las Vegas, Nevada along I15 and US95. In September 1998 the DOE issued a draft Environmental Assessment on a proposal to ship wastes by rail to an intermodal transfer facility, with truck transportation as the final leg of the journey. Included as part of the proposal was the avoidance of the Las Vegas Valley. Some of the alternatives included the use of an intermodal transfer site in California (at Barstow or Yermo) and the use of SR127 for the final leg of the journey. The all-truck alternatives in this Environmental Assessment also avoid the Las Vegas Valley and make use of SR127 as an alternative.

Concerned that they would soon become a major pathway for low-level radioactive waste to the NTS, and that this might set a precedent for future high-level radioactive waste shipments to Yucca Mountain, Inyo and San Bernardino Counties contacted their congressional delegations. Senators Feinstein and Boxer, and Congressmen Jerry Lewis (Chairman, California Republican Congressional Delegation) and Sam Farr (Chairman, California Democrat Congressional Delegation) sent letters to Secretary of Energy Bill Richardson supporting the counties' argument that shipping radioactive waste from the east into California for a destination in Nevada made little sense.

Under California Government Code, the California Highway Patrol (CHP) is the hazardous materials routing authority for the state. In the case of highway route controlled quantities (HRCQ), the CHP has designated preferred routes, that include I15 to Nevada, but do not include SR127. The low-level radioactive waste shipments under consideration are not HRCQ, and the carrier is not constrained from using SR127. However, the carrier for low-level radioactive waste shipments must meet the requirements of 49 CFR 397.101, which states that the carrier shall:

Ensure that the motor vehicle is operated on routes that minimize radiological risk; and

Consider available information on accident rates, transit time, population density and activities, and the time of day and the day of week during which transportation will occur to determine the level of radiological risk.

In order to accommodate Nevada and the City of Las Vegas, the DOE has been shipping on a northern route through rural Nevada. DOE has been looking for a southern, winter route for several months. In December, 1999 they announced their decision to split the shipments between 160 in Nevada (through Pahrump) and 127 in Inyo and San Bernardino Counties. There will be up to 12 to 15 shipments per week from Fernald, Ohio (the location currently shipping material for disposal at the NTS) with approximately half being routed up 127.

The full routing in California is: I40 to Nipton Road, Nipton Road to I-15, I-15 to SR127, SR127 to the state line.

Shipments that require placarding will be placarded class 7. Shipment is in strong, tight metal containers, and experience with these shipments is that they travel inside enclosed trailers.

The last incident that occurred involving these shipments was a leak of liquids, which was detected in the vicinity of Kingman, AZ. In that instance, there was no identified release of radioactive materials. Shipments were halted for about a year while defects in the shipping containers were investigated and corrected.

District 9 continues to be concerned with the use of secondary roads for the shipment of hazardous materials when there are shorter, faster, interstate highway routes available. Detouring to reduce political pressures while increasing the mileage and time traveled sets a dangerous precedent for both low-level and high-level radioactive waste shipments. Technically they should not change the routing unless they can demonstrate that the new route presents a reduction in the radiological risk.

cc: recipient